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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,649	03/08/2001	Junichi Yamanouchi	003510-083	4869
21839	7590	10/31/2003	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			SHOSHO, CALLIE E	
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ALEXANDRIA, VA 22313-1404			PAPER NUMBER	

1714

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/800,649

Applicant(s)

YAMANOUCHI ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-14 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-14, and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. All outstanding rejections except for those described below are overcome by applicants' amendment filed 8/11/03.

**Claim Rejections - 35 USC § 103**

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 4-11, 13-14, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. (U.S. 6,031,019) in view of Meyrick et al. (U.S. 6,344,497), Kiritani et al. (U.S. 4,665,411), and either JP 03231975 or JP 09059552.

The rejection is adequately set forth in paragraph 11 of the office action mailed 6/12/02 and is incorporated here by reference.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. in view of Meyrick et al., Kiritani et al., and either JP 03231975 or JP 09059552 as applied to claims 1, 4-11, 13-14, and 17-18 above, and further in view of Idei et al. (U.S. 5,302,437).

The rejection is adequately set forth in paragraph 12 of the office action mailed 6/12/02 and is incorporated here by reference.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsutsumi et al. (U.S. 6,031,019) in view of Meyrick et al. (U.S. 6,344,497), Kiritani et al. (U.S. 4,665,411), and Suzuki et al. (U.S. 5,508,421).

The rejection is adequately set forth in paragraph 7 of the office action mailed 3/12/03 and is incorporated here by reference.

#### **Response to Arguments**

6. Applicants' arguments filed 8/11/03 have been fully considered but they are not persuasive.

Specifically, applicants argue that Tsutsumi et al. is not a relevant reference against the present claims given that dispersion stability is achieved in the inks of Tsutsumi et al. by incorporating additives such as amino acid while in the present invention, dispersion stability is achieved through the use of the combination of polymer, dye, and solvent only without the use of any additives.

While it is agreed that Tsutsumi et al. require the use of amino acids which are not required in the present invention, in light of the open language of the present claims, i.e. ink jet ink "comprising", coloring composition "containing", coloring particulate "containing" and coloring composition "comprising", it is clear that the present claims are open to the inclusion of additional ingredients including amino acid as disclosed by Tsutsumi et al.

Further, it is not unexpected that the ink of Tsutsumi et al. does not have the same dispersion stability as the presently claimed ink given that Tsutsumi et al. by itself does not meet the requirements of the present claims. This is why Tsutsumi et al. is used in combination with

Meyrick et al. which teaches the use of presently claimed high-boiling point solvent and in combination with either JP 03231975 or JP 09059552 which each teach specific type of oil-soluble dye as presently claimed.

Applicants argue that there is no motivation to combine the cited references and that the examiner has not established a *prima facie* case of obviousness.

However, it is noted that Tsutsumi et al. disclose water-based ink comprising ionic group-containing vinyl polymer colored with oil-soluble dye. The polymer and dye are added to water-insoluble solvent to form solution or dispersion to which water is added and then the mixture emulsified. There is no disclosure in Tsutsumi et al. of high-boiling point solvent as presently claimed which is why Tsutsumi et al. is used in combination with Meyrick et al. which is also drawn to ink jet inks and discloses the equivalence and interchangeability of toluene solvent as disclosed by Tsutsumi et al. with dibutyl phthalate, a high-boiling point solvent as presently claimed, wherein Meyrick et al. use such high-boiling point solvent to produce ink with improved optical density and chroma. Therefore, given that Meyrick et al. is drawn to the same field of endeavor as Tsutsumi et al., given that Meyrick et al. disclose the equivalence and interchangeability of high-boiling point solvent as presently claimed with solvent as disclosed by Tsutsumi et al., and given that Meyrick et al. disclose motivation for using such solvent, it is the examiner's position that there is proper motivation to combine Tsutsumi et al. with Meyrick et al.

Further, while Tsutsumi et al. disclose the use of oil-soluble dye, there is no explicit disclosure of specific oil-soluble dye as presently claimed which is why Tsutsumi et al. is used in combination with either JP 03231975 or JP 09059552 which are each drawn to ink jet inks and

each disclose dye identical to that presently claimed. Given that JP 03231975 or JP 09059552 are drawn to the same field of endeavor as Tsutsumi et al., given that JP 03231975 or JP 09059552 each disclose the use of specific oil-soluble dye already generically disclosed by Tsutsumi et al., and given that JP 03231975 and JP 09059552 each provide motivation for using the dye, i.e. produce printed image with good hue (JP 03231975) or produce printed image with excellent color tone, reproducibility, and resistance to light (JP 09059552), it is the examiner's position that there is proper motivation to combine Tsutsumi et al. with either JP 03231975 or JP 09059552.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

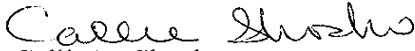
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
10/28/03